

Oroville Relicensing -- Project 2100 Geographic Information System

For the last year, Northern District has been creating a GIS based on some readily available data sets from many different agencies. Along the way, the staff has compiled a list of existing data and some potential data sets that could be integrated into the GIS from different agencies and from within our own department (See below). The GIS staff will work to make data available in formats that are easy to disseminate, and establish a system to integrate data from other sources.

To help reach the goal of relicensing and expand the GIS, Northern District would need to acquire spatial data from scientists, surveyors, engineers, and other originators. The acquisition of various data sets will allow the GIS staff to manage, map, analyze, and provide necessary geographic data in critical project areas.

As mentioned above, there is considerable amount of data readily available; however, most of this data was mapped at a small-scale. In order to provide accurate figures for acreage's, distances, and location, the GIS staff needs to compile and process some of the larger-scale data sets for inclusion into the GIS.

As the relicensing efforts move forward, there will be many studies conducted creating more data for possible inclusion with the GIS. As these studies begin to take shape, the DWR staff and their consultants should work with the GIS staff to discuss matters for integrating their data and what they might need from the GIS staff to assist them in their efforts.

The time has come to meet with the various resource groups to demo what currently exists in the GIS. At that time we would like to ask the staff members to be thinking about existing data they have or data they will be collecting. How can we make this data work together? What projection should the data be created in? Will the data be made available to the public or other agencies? With careful planning and coordination, we can answer these questions and make the GIS an integral component in managing the data and documents of the Oroville relicensing project.

Data sets currently existing

Base data

Project Boundary

Roads - 1:24,000 ADC & 1:100,000 USGS

Hydrography - 1:24,000 ADC & 1:100,000 USGS

Watershed boundaries - USGS, CalWater2

Misc. Transportation (RR, airports) - 1:24,000 ADC & 1:100,000 USGS

Public Land Survey - 1:24,000 ADC

Quad Boundaries - 1:24,000, 1:100,000, & 1:250,000 USGS

Political Boundaries - Census boundaries, Assembly Districts, County Boundaries, etc.

Scanned Quads/USGS DRG's (Digital Raster Graphic) - 1:24,000

Scanned Photos/USGS DOQQ's (Aerial Photos from random flights/Digital Ortho Quarter Quad)

Topography (7.5' Digital Elevation Models) - 1:24,000 USGS

100-Year Floodplain - FEMA

GNIS (Geographic Names Information System) - 1:24,000 contains all attributes from quad maps

Federal Lands - 1:2,000,000 USGS

Natural Resources

Mapped Riparian vegetation (Lower Feather) – 1995 & 1997 CSU, Chico Geographical Information Center
Listed species – California Natural Diversity Database (CNDDDB)
State Soils Geographic Database – 1:250,000 USDA Soil Conservation Service

Human Resources

Land Use – 1:24,000 DWR Land and Water Use

Ownership

Butte County parcels data – County of Butte
Cal Managed Areas – 1:2,000,000 UC, Santa Barbara GAP program
DFG Lands – 1:24,000 CA Dept. of Fish and Game

Potential data sets

Facilities

Project Facilities (Powerhouses, Diversion structures, Utility lines, etc.)
 As built drawings
 Current configuration
 Proposed future projects
Other Utilities
 Powerlines
 Gas Transmission Lines
Fish Hatcheries

Natural Resources

Habitat

 Pre-project riparian vegetation
 Post-project riparian vegetation
 Wetlands delineated by Joyce Lacey
 Fish spawning gravels
 Vegetation and Habitat Classification, mapped by Joyce Lacey and crew using California
 Native Plant Society nomenclature
 Shaded Riverine and Aquatic Habitat
 Other Habitat layers

Individual Species Occurrences

 Listed species –surveys
 Sensitive Wildlife Species Distributions
 Sensitive Plant Species Distributions
 Sensitive Fish Species Distributions
 Exotic and Invasive Species

Natural Resource Management

 Wildlife Areas
 Fish and Wildlife Management Plans
 Wild and Scenic River Corridors
 Timber Harvests

Water Quality

 Groundwater – Comp. Study or Jerry Boles' work
 Monitoring Stations

Geology and Soils

 Surface Geology and Geomorphology
 Soil and Bank Erosion

Human Resources

Archaeological Resources

Cultural Resources

Recreational Sites (current and proposed)

Hunting Areas

Fishing Info.

Boat Launch Sites

Camping Areas

Parking Areas

Bike Trails

Hiking Trails

Equestrian Trails

OHV Areas

Ownership

Public Ownership

Easements

All parcels (public and private)